Department of Ecology

EIM Environmental Information Management

January 13, 2014

Dear EIM Data Submitters,

We would like to clarify the EIM requirements for submitting top of well casing elevation. **We require that you include top of well casing (or other water level measuring point) elevations when you submit well locations to EIM.** We use these elevations to calculate groundwater elevations from the depth to groundwater measurements that you submit with your result data.

We recommend that top of well casing elevations be established using conventional survey methods and/or a survey-grade global positioning system (GPS). To do this, you typically establish at least one on- or near-site reference point with known horizontal coordinates and elevation(s). You then survey your wells relative to the reference point to determine their horizontal coordinates and top of casing elevations.

Your elevations must be reported relative to the North American Vertical Datum of 1988 (NAVD88). This is the Washington State standard. If a NAVD88 reference monument is not reasonably available to tie into, you can use another major datum or a local datum and convert the results to NAVD88 using our online help document and conversion tools.

Where it is not practical to establish top of well casing elevations using these methods (e.g. remote site or large study area), you can use alternative methods such as non-survey grade GPS or estimating the *land surface elevation* at the wellhead from a map. When you submit *land surface elevation* at your wellhead, you must also measure and submit the well casing stickup (i.e., Well Water Level Measuring Point or TOC Height). You can use the EIM Lat/Long Tool in the EIM map to estimate the land surface elevation at your wellhead. We use the land surface elevation along with well casing stickup to calculate groundwater elevations from your depth to groundwater measurements.

Surveyed elevations are not required to enter data into EIM. However, surveyed elevations might be required by Ecology on a study-specific basis, depending on the purposes of the study. For example, we typically require surveyed elevations when groundwater flow direction and gradient is integral to the study. Consult your Ecology staff contact to discuss the appropriate methods for establishing elevations prior to conducting field work.

Contact your EIM Data Coordinator with any questions about this memo.

Thanks!

The EIM Team